## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

(currently amended) A method for determining an age of an object comprising:
measuring a first strength of a first scent of said object with a first electronic
sensor, a decay rate constant (α₁) of said first scent being known;

measuring simultaneously a second strength of a second scent of said object with a second electronic sensor, a decay rate constant ( $\alpha_2$ ) of said second scent being known; calculating a current scent ratio ( $\sigma$ ) of said first and second scent strengths; and calculating determining said age of said object starting from a reference time for which a reference scent ratio ( $\sigma_0$ ) of said scent strengths has been registered; and displaying said age.

2. (currently amended) The method of claim 1, wherein said <u>calculating said age</u> determining is performed by applying to said current scent ratio  $\sigma$  the following formula, giving said age of said object as represented by the symbol t:

$$t = (\alpha_1 - \alpha_2)^{-1} \cdot \ln \left( \frac{\sigma}{\sigma_0} \right),\,$$

where  $\sigma_0$  designates said reference scent ratio, and  $\alpha_1$  and  $\alpha_2$  designate said first and second decay rate constants rates of said first and second scents, respectively.

3. (currently amended) The method of claim 1, wherein said <u>calculating said age</u> determining is performed by comparing said current scent ratio ( $\sigma$ ) to preregistered data corresponding to respective age values.

Appl. No. 10/766,738 Amdt. dated November 9, 2006 Reply to Office action of August 9, 2006

- 4. (previously presented) The method of claim 1, wherein said reference scent ratio  $(\sigma_0)$  is determined by measuring said first and second scent strengths at an initial time from which said age of said object is to be determined.
- 5. (currently amended) The method of claim 1, wherein said first and second decay rate constants rates ( $\alpha_1$ ,  $\alpha_2$ ) are determined during a process of characterizing of sensors measuring said first and second scents.
- 6. (currently amended) The method of claim 1, wherein said first scent is and second scents are included in a first at least one volatile compound sprayed on said object and said second scent is included in a second volatile compound sprayed on said object.
- 7. (previously presented) The method of claim 6, wherein said reference scent ratio  $(\sigma_0)$  is preregistered and corresponds to said first and second scent strengths when spraying said compound.
- 8. (currently amended) A method of determining a freshness of goods from a reference time, comprising:

measuring a first strength of a first scent of said goods with a first electronic sensor, a decay rate constant  $(a_1)$  of said first scent being known;

measuring simultaneously a second strength of a second scent of said goods with a second electronic sensor, a decay rate constant ( $\alpha_2$ ) of said second scent being known;

calculating a current scent ratio  $(\sigma)$  of said first and second scent strengths; and calculating determining said freshness of said goods starting from a reference time for which a reference scent ratio  $(\sigma_0)$  of said scent strengths has been registered; and displaying an indicator of said freshness.

9. (currently amended) A method of marking an object with a volatile identification code, comprising:

spraying a first volatile component onto said object; and

spraying a second volatile component onto said object, wherein <u>volatile</u> characteristics of said first and second volatile components sprayed on said object define said volatile identification code.

10. (currently amended) A method of sealing an object, comprising:

introducing into an impermeable seal attached to said object a first volatile component;

introducing into said impermeable seal a second volatile component;

simultaneously determining a first scent strength of said first volatile component and a second scent strength of said second volatile component at a time when said impermeable seal is unbroken; and

determining a reference scent ratio ( $\sigma_0$ ) from said first scent strength and said second scent strength; and

determining whether said impermeable seal is broken based on said reference scent ratio  $(\sigma_0)$ .

11. (currently amended) The method of claim 10, further comprising:

simultaneously determining a first scent strength of said first volatile component and a second scent strength of said second volatile component at a second time that is subsequent to said time when said impermeable seal is unbroken; and

calculating determining a current reference scent ratio  $(\sigma)$   $(\sigma_0)$  from said first scent strength and said second scent strength that are determined at said second time, wherein said seal is considered to have been broken if said current scent ratio  $(\sigma)$  differs from said reference scent ratio  $(\sigma_0)$  by more than an acceptable error  $\varepsilon$ .

12. (currently amended) A system for determining an age of <u>an object a product</u> containing first volatile component and a second volatile component, comprising:

a first electronic sensor that generates a first signal in response to a first scent of said first volatile component;

a second electronic sensor that generates a second signal in response to a second scent of said second volatile component;

a calculating unit for calculating a current scent ratio ( $\sigma$ ) based on said first and second signals, and for extracting said age of said object from a reference time for which a reference scent ratio ( $\sigma$ <sub>0</sub>) is registered; and

a display for displaying an indicator of said age.

- 13. (new) The method of claim 9, further comprising sensing said volatile characteristics via a set of sensors that generate a distinctive signature that are associated with spraying both said first volatile component and said second volatile component on said object.
- 14. (new) The system of claim 12, wherein said calculating unit extracts said age of said object by applying to said current scent ratio  $\sigma$  the following formula, giving said age of said object as represented by the symbol t:

$$t = (\alpha_1 - \alpha_2)^{-1} \cdot \ln \left( \frac{\sigma}{\sigma_0} \right),\,$$

where  $\sigma_0$  designates said reference scent ratio, and  $\alpha_1$  and  $\alpha_2$  designate first and second decay rate constants of said first and second scents, respectively.